



DEPARTMENT OF THE NAVY

Commander
Naval Base Norfolk
1530 Gilbert ST. STE 200
Norfolk, VA 23511-2797

11/24/93 - 01950

IN REPLY REFER TO:
5090

N42A/392

NOV 24 1993

Mr. Dennis Walker, General Manager
Norfolk & Portsmouth Belt Line Railroad Company
P.O. Box 7547
Portsmouth, VA 23706

Re: Groundwater Monitoring Well Agreement between Norfolk & Portsmouth Belt Line Railroad Company and United States of America

Dear Mr. Walker:

As discussed in our letter of May 5, 1993, one 65 foot deep groundwater monitoring well was installed on railroad property (well #17B as shown in enclosure (1)) to study potential environmental impacts of the Camp Allen Landfill. Only one of the two wells planned was actually installed on Railroad property; field siting adjustments of the other well (well #16B) placed it off railroad property. The analyses performed on samples taken from well 17B, indicate the presence of volatile organic compounds (VOCs), pesticides and metals. VOCs, which are derivatives of solvent-type chemicals such as paint thinners, were present and exceeded some regulatory standards, note that these levels are developed for drinking water and are in parts per billion.

The data table below provides analytical results for two rounds of sampling at well #17B. The results for well #16B were included for your information. Only results for chemicals which exceeded standards are included.

	round 1, ug/l		round 2, ug/l		drinking water
	<u>#17B</u>	<u>#16B</u>	<u>#17B</u>	<u>#16B</u>	<u>standard, ug/l</u>
Volatiles					
Vinyl Chloride	22	ND	8	ND	2
1,2 dichloroethane	15	ND	10	ND	5
1,2 dichloroethene	110	ND	59	ND	7
trichloroethene	33	ND	16	ND	5

VDEQ groundwater
standard, ug/l

Pesticides

Heptachlor epoxide	.05	.05	.001
4,4-DDT	.1	.016	.001

	round 1, ug/l		round 2, ug/l		VDEQ groundwater standard, ug/l
Metals (total)	#17B	#16B	#17B	#16B	drinking water standard, ug/l
Mercury	.2	ND			.05
Zinc	ND	61			50

The ND noted above indicates that the substance was tested for but was not detected.

Our study indicates that drainage ditches in the immediate area surrounding the landfill intercept the shallow groundwater thereby precluding contamination of the upper aquifer at 0-40'.

An additional deep well was installed on the other side of the landfill on Navy property and sampled. A comparison of the results for this well and the well on railroad property indicates a contamination plume end point north of your well on Navy property.

A Camp Allen Remedial Investigation/Feasibility Study (RI/FS) conducted in accordance with Environmental Protection Agency (EPA) Regulations and the National Contingency Plan has been completed and a draft report produced. After comment by EPA, Virginia Department of Environmental Quality, City of Norfolk and citizens, a Remedial Action Plan will be developed to address cleanup. It is likely that a pump and treat unit will be installed, in the fall of 1994, to clean groundwater in the area.

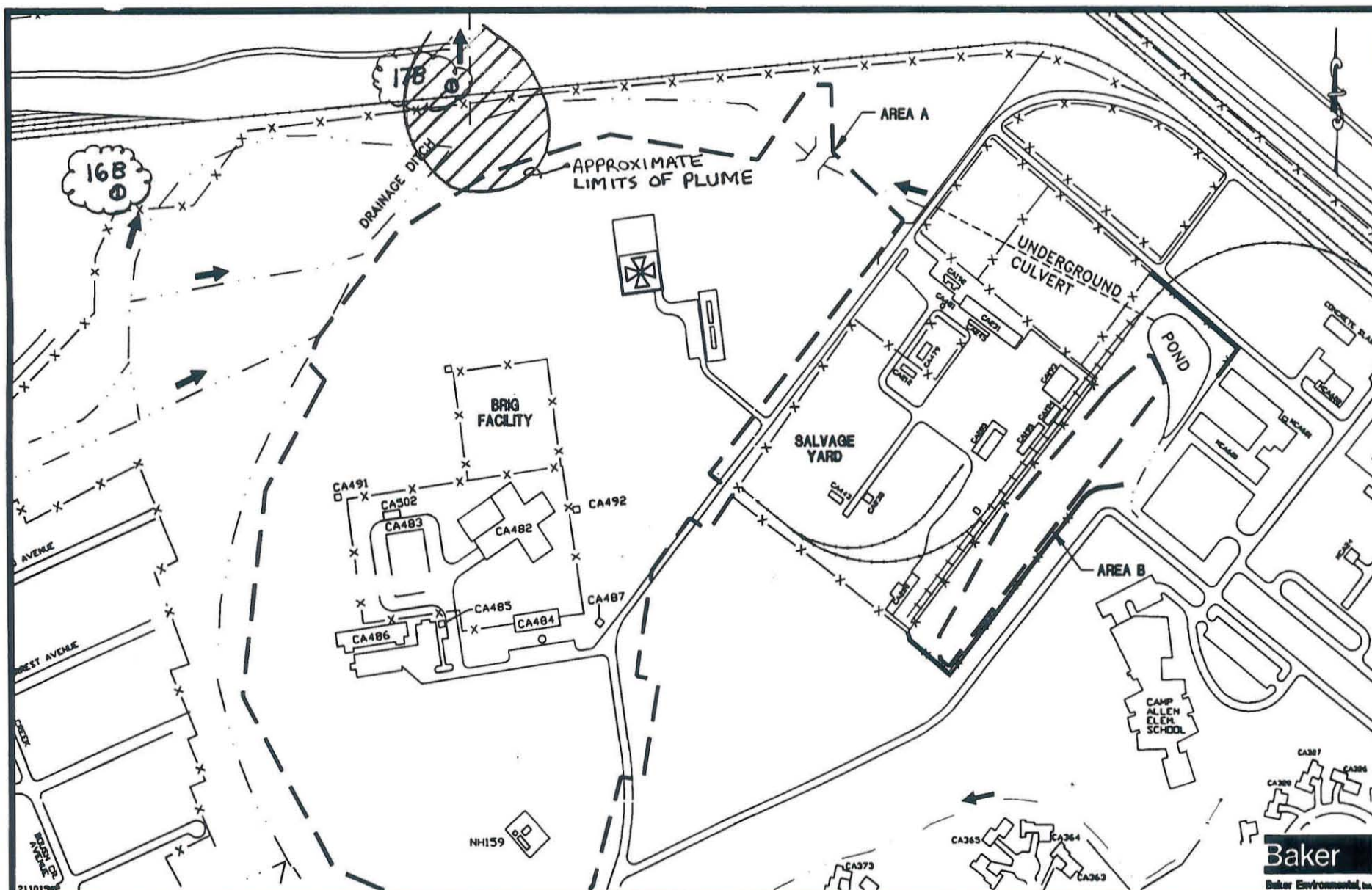
If you have any questions or comments, please contact Mr. David Forsythe at 444-3009.

Sincerely,

Cherryl F. Barnett
 CHERRYL F. BARNETT
 Director, Environmental Programs
 By direction of the Commander

Encl:
 (1) Map of Well locations

Blind copy to:
 LANTNAVFACENGCOM



LEGEND



MONITORING WELL



STREAM FLOW DIRECTION

— LIMITS OF AREA A AND AREA B LANDFILL

SOURCE: LANTDIV, OCT. 1991

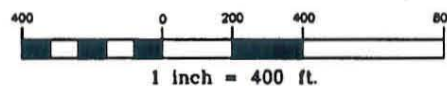


FIGURE 2-7
CAMP ALLEN LANDFILL

(AREAS A AND B)

NORFOLK NAVAL BASE
NORFOLK, VIRGINIA

Baker
Baker Environmental, Inc.